

CLAIMS

What is claimed is:

1. A vibration dampening system for a seat in a vehicle comprising:
a seat adapted to be coupled to the vehicle; and
a component coupled to the seat and having a primary function related to use of the seat, the component decoupled from the seat in at least one direction such that the component is able to move relative to the seat thereby having a second function related to dampening vibration in the seat.
2. The vibration dampening system of claim 1, wherein the component is a heating mat and the primary function includes heating the seat.
3. The vibration dampening system of claim 2, wherein the heating mat is decoupled from the seat via connectors, the connectors comprising a rigid member coupled to an elastomeric member such that the rigid member is able to move relative to the elastomeric member.
4. The vibration dampening system of claim 3, wherein the rigid member is a ball and the elastomeric member is a socket, the ball and socket cooperating to decouple the heating mat such that the heating mat may move relative to the seat in all directions.

5. The vibration dampening system of claim 1, wherein the component is located within the seat.

6. The vibration dampening system of claim 1, wherein the component is an airbag inflator and the primary function includes inflating an airbag.

7. The vibration dampening system of claim 6, wherein the airbag inflator is decoupled from the seat via connectors, the connectors comprising a rigid member coupled to an elastomeric member such that the rigid member is able to move relative to the elastomeric member.

8. The vibration dampening system of claim 7, wherein the rigid member is a ball and the elastomeric member is a socket, the ball and socket cooperating to decouple the airbag inflator such that the airbag inflator may move relative to the seat in all directions.

9. The vibration dampening system of claim 1, wherein the component is an adjustment mechanism and the primary function includes adjusting a position of the seat.

10. The vibration dampening system of claim 9, wherein the adjustment mechanism is decoupled from the seat via connectors, the connectors comprising a rigid member coupled to an elastomeric member such that the rigid member is able to move relative to the elastomeric member.

11. The vibration dampening system of claim 1, wherein the component is decoupled from the seat in a horizontal direction relative to the seat.

12. The vibration dampening system of claim 11, further comprising a second component coupled to the seat and having a primary function related to use of the seat, the second component decoupled from the seat in a vertical direction relative to the seat such that the second component is able to move relative to the seat thereby having a second function related to dampening vibration in the seat.

13. A method for dampening vibrations in an assembly of components comprising:

selecting a component of an assembly of components, the component having a primary function;

decoupling the selected component from the assembly of components such that the component may move relative to the assembly of components thereby providing a secondary function of dampening vibrations; and

tuning the selected component to a predetermined resonant frequency and direction whereby vibrations in the assembly of components are reduced.